

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Canceled)
2. (Canceled)
3. (Canceled)
4. (Currently Amended) The method of claim 3 31 wherein the multi-effect triazole is ~~in a concentration of about 0.1 mg/l.~~
5. (Currently Amended) The method of claim 2 31 wherein the cotton seedlings of step (a) are grown in ~~the additional presence of~~ medium further comprising  $\alpha$  naphthalene acetic acid.
6. (Currently Amended) The method of claim 5 wherein the concentration of  $\alpha$  naphthalene acetic acid is ~~in a concentration of about 0.01 mg/l to about 0.2 mg/l.~~
7. (Currently Amended) The method of claim 6 wherein the concentration of  $\alpha$  naphthalene acetic acid is ~~in a concentration of about 0.05 mg/l.~~

8. (Currently Amended) The method of claim 4 31 wherein the step of regenerating the somatic embryos into whole plants is carried out in the presence of about 0.05 to 0.2 mg/l of multi-effect triazole.
9. (Canceled)
10. (Currently Amended) The method of claim 9 8 wherein the concentration of the multi-effect triazole is ~~in a concentration of~~ about 0.1 mg/l.
11. (Currently Amended) The method of claim 8 wherein the step of regenerating the somatic embryos is carried out ~~in the additional presence of~~ about 0.01 mg/l to 0.2 mg/l  $\alpha$  naphthalene acetic acid.
12. (Canceled)
13. (Currently Amended) The method of claim 42 11 wherein the concentration of  $\alpha$  naphthalene acetic acid is ~~in a concentration of~~ about 0.05 mg/l.
14. (Currently Amended) The method of claim 4 31 wherein the step of inducing callus formation is carried out in a callus inducing culture medium comprising myo-inositol, vitamin B<sub>1</sub> and a dimethylallyl (amino) purine.
15. (Currently Amended) The method of claim 4 31 wherein the step of inducing somatic embryo formation is carried out in a somatic embryo inducing culture medium comprising myo-inositol, vitamin B<sub>1</sub> and a dimethylallyl(amino)purine.

16. (Currently Amended) The method of claim 14 wherein the callus inducing culture medium comprises ~~myo-inositol in an amount from about 50 mg/L to 150 mg/L~~ of myo-inositol, ~~vitamin B<sub>1</sub> in an amount from about 0.2 to 10 mg/L~~ vitamin B<sub>1</sub>, and ~~a dimethylallyl (amino) purine in an amount from about 0.1 to 7.5 mg/L~~ dimethylallyl (amino) purine.
17. (Original) The method of claim 16 wherein the callus inducing culture medium comprises 100 mg/L myo-inositol, 0.4 mg/L vitamin B<sub>1</sub> and 5 mg/L dimethylallyl (amino) purine.
18. (Currently Amended) The method of claim 15 wherein somatic embryo inducing culture medium comprises ~~myo-inositol in an amount from about 50 mg/L to 100 mg/L~~ myo-inositol, ~~vitamin B<sub>1</sub> in an amount from about 0.2 to 10 mg/L~~ vitamin B<sub>1</sub>, and ~~a dimethylallyl (amino) purine in an amount from about 0.1 to 0.5 mg/L~~ dimethylallyl (amino) purine.
19. (Original) The method of claim 18 wherein somatic embryo inducing culture medium comprises 100 mg/L myo-inositol, 0.4 mg/L vitamin B<sub>1</sub> and 5 mg/L dimethylallyl (amino) purine.
20. (Currently Amended) The method of claim 4 31 wherein the step of inducing callus formation is carried out in a callus inducing culture medium comprising vitamin B<sub>5</sub>, B<sub>1</sub>, (2,4-dichlorophenoxy) acetic acid, ~~MgCl~~ MgCl<sub>2</sub> and glucose.
21. (Currently amended) The method of claim 4 31 wherein the step of inducing somatic embryo formation is carried out in a somatic embryo inducing culture

medium comprising vitamin B<sub>5</sub> B<sub>1</sub>, (2, 4-dichlorophenoxy) acetic acid, ~~MgCl~~ MgCl<sub>2</sub> and glucose.

22. (Currently Amended) The method of claim 20 wherein the callus inducing culture medium comprises ~~vitamin B<sub>5</sub> in an amount~~ from about 0.2 mg/L to 10 mg/L vitamin B<sub>1</sub>, (2,4-dichlorophenoxy) acetic acid in an amount from about 0.05 mg/L to 0.15 mg/L (2,4-dichlorophenoxy) acetic acid, MgCl in an amount from about 0.4 mg/L to 1.2 mg/L, MgCl<sub>2</sub> and glucose in an amount from about 1% to 5% glucose.
23. (Currently Amended) The method of claim 22 wherein the callus inducing culture medium comprises 0.4 mg/L vitamin B<sub>5</sub> B<sub>1</sub>, 0.1 mg/L (2,4-dichlorophenoxy) acetic acid, 0.8 mg/L ~~MgCl~~ MgCl<sub>2</sub> and 3% glucose.
24. (Currently Amended) The method of claim 21 wherein the somatic embryo inducing culture medium comprises ~~vitamin B<sub>5</sub> in an amount~~ from about 0.2 mg/L to 10 mg/L vitamin B<sub>1</sub>, (2,4-dichlorophenoxy) acetic acid in an amount from about 0.05 mg/L to 0.15 mg/L (2,4-dichlorophenoxy) acetic acid, MgCl in an amount from about 0.4 mg/L to 1.2 mg/L, MgCl<sub>2</sub> from about 1% to 5% glucose.
25. (Currently amended) The method of claim 24 wherein the somatic embryo inducing medium comprises 0.4 mg/L vitamin B<sub>5</sub> B<sub>1</sub>, 0.1 mg/L (2, 4-dichlorophenoxy) acetic acid, 0.8 mg/L ~~MgCl~~ MgCl<sub>2</sub> and 3% glucose.
26. (Currently amended) A method according to ~~any of claims 14-25~~ claim 31, wherein the medium of steps (a), (b), (c), (d) or (e) further comprises from about 1.0 g/L to 3.0 g/L gellan gum.

27. (Canceled)
28. (Currently Amended) The method of claim ~~4~~ 31 wherein the step of inducing somatic embryo culture is carried out in a somatic embryo-inducing medium comprising a nitrate in an amount from about 1900 mg/L to ~~5700~~ 3800 mg/L.
29. (Canceled)
30. (Currently Amended) A method according to ~~either claim 28-29~~ 28, wherein the nitrate is ~~NaNO<sub>3</sub>~~ KNO<sub>3</sub>.
31. (New) A method for producing a transgenic cotton plant comprising:  
(a) preparing explants from fibrous roots of cotton seedlings cultured in medium comprising about 0.05 mg/l to 0.2 mg/l of multi-effect triazole;  
(b) culturing said root explants in medium comprising a plant hormone selected from 2, 4, dichlorophenoxy acetic acid and  $\alpha$  naphthalene acetic acid to induce callus formation;  
(c) transforming said callus with *Agrobacterium tumifaciens* comprising a DNA encoding a chimeric gene of interest to effect the stable transfer of said chimeric gene to the genome of cells comprising the callus tissue;  
(d) inducing somatic embryos from said transformed callus; and  
(e) regenerating whole transgenic cotton plants having said gene of interest from said somatic embryos.
32. (New) The method of claim 31 wherein said DNA encodes an herbicide resistance gene.

33. (New) The method of claim 31 wherein said DNA encodes a gene that confers glyphosate resistance.
34. (New) The method of claim 31 wherein said DNA encodes a shikimate synthase gene.
35. (New) The method of claim 31 wherein said DNA encodes a *Bacillus thuringiensis* toxin gene.
36. (New) The method of claim 31 wherein callus derived from explants of cotton seedling fibrous roots is transformed with *Agrobacterium tumefaciens* comprising a first DNA encoding a chimeric gene of interest and a second DNA encoding a selectable marker gene to effect the stable transfer of said chimeric gene and said selectable marker gene to the genome of cells comprising the callus tissue.